

Technical Information

TI/N-CPN/IP Palatinol® 911P
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Page 1 of 3

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Petrochemicals Plasticizers



Palatinol® 911P

Palatinol® 911P is a primary plasticizer for polyvinyl chloride and copolymer resins. It offers excellent permanence, low volatility, good efficiency and good retention of physical properties for heat aging vinyl applications.

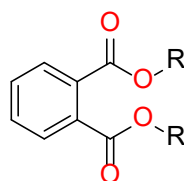
Chemical Nature 9-10-11 Linear phthalate

BASF Registered Name Palatinol® 911P

CAS No. 68515-43-5

Average Molecular Weight 450

Molecular Structure



where R = C₉H₁₉, C₁₀H₂₁ or C₁₁H₂₃

Product Specifications

	Value	Test Method
Specific gravity @ 25°/25 °C	0.956 - 0.962	ASTM D-4052
Ester content, % by weight (minimum)	99.6	ASTM D-3465
Acid Number, mg KOH/g (maximum)	0.07	ASTM D-1045
Water, % by weight (maximum)	0.1	ASTM E-1064
Color, Pt-Co Units (APHA, maximum)	50	ASTM D-5386
Suspended Matter	COLSFFM*	visual

*Clear Oily Liquid Substantially Free of Foreign Material

Typical Physical Properties

The following data were measured in the BASF Corp. laboratory. They do not represent any legally binding guarantee of properties for our sales product.

	Value
Pour point, °C	-20
Flash point (COC), °C	227
Odor	mild characteristic
Surface Tension, mN/m	31.6
Solution Temperature, °C	135
Plastisol Gelation Temperature, °C	146
Vapor Pressure @ 20 °C, mbar	< 0.01
Solubility @ 25 °C in water, mg/L	< 0.01

Viscosity & Density Data

Temperature (°C)	Dynamic viscosity (cP)	Density (g/cm ³)
-20	1,100	0.988
-10	450	0.980
0	209	0.973
10	108	0.966
20	60.9	0.959
40	24.1	0.945
60	11.8	0.931
80	6.79	0.917

Description

Palatinol® 911P, a linear C₉, C₁₀, C₁₁ phthalate made from normal alcohol, is a primary plasticizer for polyvinyl chloride and copolymer resins. Palatinol® 911P offers excellent permanence, low volatility, good efficiency and good retention of physical properties for heat aging vinyl applications. Heat and light stability of Palatinol® 911P is superior to phthalate esters made from branched chain alcohols.

Applications

Palatinol® 911P is suggested for use in sheeting, film extrusion, and vinyl dispersions where good low temperature properties are required and where low volatility ensures a greater permanence. It is especially recommended in automotive applications for low fog properties and for wire insulation.

Palatinol® 911P is a medium molecular weight linear phthalate with properties intermediate to Palatinol® 810P and Palatinol® 111P. Palatinol® 911P offers improvement in oven aging, weathering and fogging performance in applications where Palatinol® 810P fails with no loss of low temperature performance. Palatinol® 911P offers improved efficiency and processing advantages where Palatinol® 111P performance properties can be reduced.

Safety

Palatinol® 911P does not require special handling. Handle in accordance with good industrial hygiene and safety practices. Avoid eye contact by wearing personal protective equipment. If eye contact occurs, wash with flowing water and contact physician.

Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation.

Always refer to the Safety Data Sheet (SDS) for detailed information on safety.

Storage and Handling

Palatinol® 911P can be stored for one year at temperatures below 40°C, if moisture is excluded.

Packaging

Palatinol® 911P is available in bulk, tank trucks or rail cars.

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Note

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